

**IN THE CLAIMS:**

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claim 16, and AMEND claims 1, 5, 7, 11, 14-15, and 17-19 in accordance with the following:

B1  
1. (Currently Amended) A communication apparatus ~~for communicating with~~ telephony networks, comprising:  
memory ~~for storing~~ sets of impedance control values ~~used for~~ respectively simulating a plurality of circuit impedances;  
a processor configured to:  
automatically detect an impedance characteristic of a telephony network to which the communication apparatus is connected;  
automatically select one of said sets of impedance control values based on characteristics of a telephony network to which the communication apparatus is or will be connected said detected impedance characteristic; and  
combine data to be transmitted over said telephony network with said selected set of impedance control values;  
a digital-to-analog converter that converts the combined data and said selected set of impedance control values into analog signals; and  
an interface port connected to said telephony network that transmits the output of the digital-to-analog converter over the telephony network, wherein the impedance required by the telephony network is simulated based on the selected set of impedance control values.

2. (Original) The communication apparatus of claim 1, wherein said processor is configured to continuously transmit said selected set of impedance control values during said communication session.

3. (Cancelled)

B) 4. (Original) The communication apparatus of claim 1, further comprising an input device configured to receive an input from a user, said processor configured to select said selected set of impedance control values based on said input.

5. (Currently Amended) The communication apparatus of claim 1, wherein said processor is further configured to identify based on said detected impedance characteristic, which of said sets of impedance control values, when converted to analog signals and transmitted to said interface port, causes said interface port to simulate said impedance that substantially matches said impedance of said telephony network.

6. (Original) The communication apparatus of claim 5, wherein each of said sets of impedance control values, when converted to analog signals and transmitted to said interface port, causes said interface port to simulate a different impedance.

7. (Currently Amended) A communication apparatus ~~for~~ communicating with telephony networks, comprising:

means for storing sets of impedance control values used for simulating a plurality of circuit impedances;

means for automatically detecting an impedance characteristic of a telephony network to which the communication apparatus is connected;

means for automatically selecting one of said sets of impedance control values based on ~~characteristics of a telephony network to which the communication apparatus is or will be connected~~ said detected impedance characteristic;

means for combining data to be transmitted over said telephony network with said selected set of impedance control values;

means for converting said combined data and said selected set of impedance control values into analog signals; and

means for transmitting said analog signals over said telephony network, wherein the impedance required by the telephony network are simulated based on the selected set of impedance control values.

8. (Original) The communication apparatus of claim 7, wherein said transmitting means continuously transmits said selected set of impedance control values during said communication session.

9. (Cancelled)

B<sup>1</sup> 10. (Original) The communication apparatus of claim 7, further comprising a means for receiving an input from a user, said selecting means configured to select said selected set of impedance control values based on said input.

11. (Currently Amended) A method for communicating with telephony networks, comprising the steps-operations of:

providing an interface port;  
interfacing said interface port with a communication connection of a telephony network;  
storing sets of impedance control values used for simulating a plurality of circuit impedances;

automatically detecting an impedance characteristic of the telephony network to which the interface port is interfaced;

automatically selecting one of said sets of impedance control values based on characteristics of a telephony network to which the interface port is or will be connectedsaid detected impedance characteristic;

combining data to be transmitted over said telephony network with said selected set of impedance control values;

converting said combined data and said selected set of impedance control values into analog signals;

transmitting said analog signals over the telephony network; and

simulating the impedance required by the telephony network based on the selected set of impedance control values.

12. (Cancelled)

13. (Original) The method of claim 11, further comprising the steps of:  
receiving an input; and  
performing said selecting step based on said input.

14. (Currently Amended) The method of claim 11, further comprising the steps  
operations of:  
interfacing said interface port with a communication connection of another telephony  
network;  
automatically detecting an impedance characteristic of said other telephony network;  
automatically selecting another of said sets of impedance control values based on said  
another detected impedance characteristic;  
serially transmitting said other selected set of impedance control values to said digital-to-  
analog converter;  
converting, at said digital-to-analog converter, said other set of impedance control values  
into other analog signals;  
simulating another impedance at said interface port based on said other analog signals;  
and  
performing said automatically selecting another of said sets of impedance control values  
step-operation such that said other impedance substantially matches ~~an~~ said impedance of said  
other telephony network as measured from said other communication connection.

15. (Currently Amended) A method for communicating with telephony networks,  
comprising the ~~steps~~ operations of:  
providing an interface port;  
interfacing said interface port with a communication connection of a telephony network;  
automatically detecting an impedance characteristic of said telephony network;  
transmitting analog signals to said interface port, said analog signals having voltages;  
automatically varying said voltages of said analog signals such that said interface port  
continuously simulates ~~a particular~~ said detected impedance during a communication session in  
response to said analog signals; and  
combining values from said selected set of impedance control values with data that is to  
be communicated from said interface port to a remote communication device.

16. (Cancelled)

17. (Currently Amended) The method of claim 15, further comprising the step operations of:

storing sets of impedance control values;

automatically selecting one of said sets of impedance control values based on said detected impedance characteristic;

serially and continuously transmitting said selected set of impedance control values to a digital-to-analog converter during said communication session;

producing said analog signals at said digital-to-analog converter; and

performing said automatically varying step-operation based on said selected set of impedance control values.

18. (Currently Amended) The method of claim 17, further comprising the steps operations of:

receiving an input; and

performing said automatically selecting step-operaiton based on said input.

19. (Currently Amended) The method of claim 17, further comprising the steps operations of:

interfacing said interface port with a communication connection of another telephony network;

automatically detecting an impedance characteristic of said other telephony network;

transmitting other analog signals to said interface port, said other analog signals having other voltages;

automatically varying said other voltages of said other analog signals;

causing said interface port to continuously simulate a particular impedance during another communication session in response to said other analog signals;

selecting another of said sets of impedance control values based on said detected impedance characteristic of said other telephony network;

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serially and continuously transmitting said other selected set of impedance control values  
to said digital-to-analog converter during another communications session;  
producing said other analog signals at said digital-to-analog converter; and  
performing said automatically varying said other voltages ~~step-operation~~ based on said  
other selected set of impedance control values.

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